Industrial Development Subsidiary Agreement

ELK VALLEY
INDUSTRIAL DEVELOPMENT
OPPORTUNITIES STUDY

AUGUST 1982

Research Report

Province of British Columbia
Ministry of Industry and Small Business Development

Government of Canada
Gouvernement du Canada

Regional Economic Expansion
Expansion Économique Régionale

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ELK VALLEY
INDUSTRIAL DEVELOPMENT
OPPORTUNITIES STUDY

AUGUST 1982

Prepared for:

THE ECONOMIC DEVELOPMENT COMMISSION OF
THE REGIONAL DISTRICT OF EAST KOOTENAY

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In Association with:

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EXECUTIVE SUMMARY

The Elk Valley Industrial Development Opportunities Study was conducted during the winter and spring of 1982. Its principle objective was to identify possible industrial development opportunities in the Elk Valley area resulting from the rapid growth of the coal mining industry.

The work was funded by a grant from the research program of the Canada-British Columbia Industrial Development Subsidiary Agreement. The major activities included a general overview of the mining industry and its projected expansion to 1991; an analysis of mining company purchasing and source for supply categories; interviews with mining personnel and other relevant people connected with the industry; a review of recent studies in the subject area; a review of the B.C. Procurement Policy, and an examination of the current industrial development and infrastructure in the Valley area.

The result of these activities has been to confirm that industrial development opportunities relating to the coal mining industry do exist in the Elk Valley area.

These opportunities are generally of two broad types which include:

- Import substitution opportunities; and
- Special market opportunities.

IMPORT SUBSTITUTION OPPORTUNITIES

The identified opportunities in this category include:

- Coal dust suppression spray manufacturing; and
- Coal load-out equipment manufacturing.

A comprehensive investigation of the potential for replacement parts manufacturing was not possible due to the unavailability of consistent purchasing data. Some potential for local development in this area may exist but a significant amount of additional work would be required to carry out an appropriate investigation.

SPECIAL MARKET OPPORTUNITIES

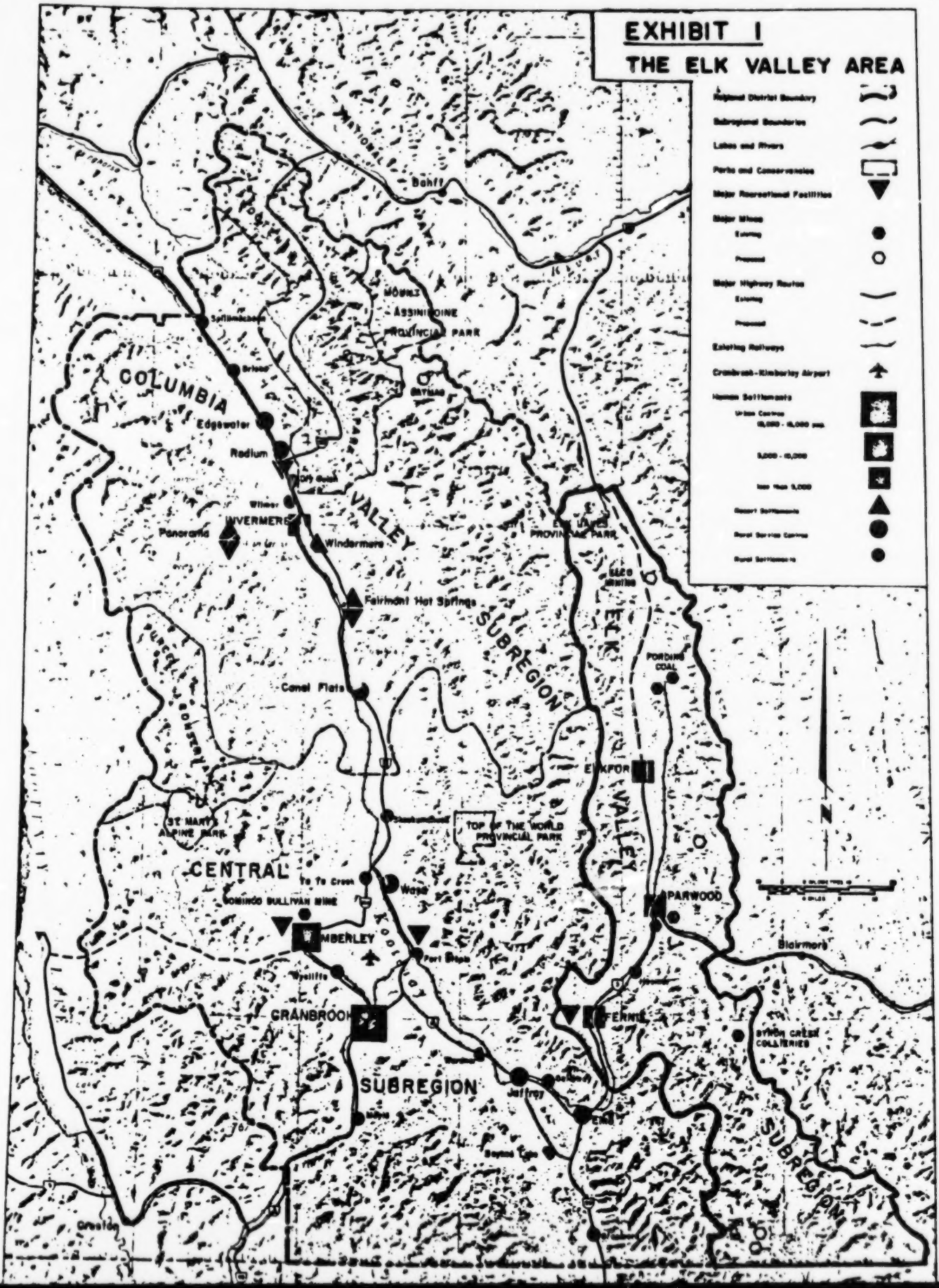
The identified opportunities in this category include:

- Replacement parts warehousing;
- Work clothing laundry service and manufacturing;
- Concrete and specialty concrete products manufacturing; and
- Railway tie manufacturing.

PRIORITIES FOR FURTHER STUDY

The opportunities which appear to be especially worthy of detailed feasibility studies include:

- Replacement parts warehousing;
- Work clothing laundry service; and
- Coal load-out equipment manufacturing.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THE ELK VALLEY AREA
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Lakes and Rivers
Parks and Conservancies
Major Recreational Facilities
Major Mines
Existing
Proposed
Major Highway Routes
Existing
Proposed
Existing Railways
Cranbrook-Kimberley Airport
Human Settlements
Urban Centres
10,000 - 15,000 pop.
5,000 - 10,000
less than 5,000
Resort Settlements
Rural Service Centres
Rural Settlements
COLUMBIA
VALLEY
SUBREGION
Banff
MOUNT ASSINIBOINE PROVINCIAL PARK
Spillimacheen
Brisco
Edgewater
Radium
Dry Gulch
Wilmer
INVERMERE
Panorama
Windermere
Fairmont Hot Springs
Canal Flats
PURCELL MOUNTAINS
ST MARY'S ALPINE PARK
CENTRAL
SUBREGION
Ta Ta Creek
Wasa
DOMINCO BULLIVAN MINE
KIMBERLEY
Port Steele
Cranbrook
GRANBROOK
Jaffray
Creston
TOP OF THE WORLD PROVINCIAL PARK
ELK VALLEY
SUBREGION
FORDING COAL
ELKFORD
FERNIE
Fernie
Blairmore
BYRON CREEK COLLIERIES
N

I INTRODUCTION

The Elk Valley is located within the Regional District of East Kootenay and is shown in Exhibit 1, opposite. The area has experienced rapid economic growth over the past decade. This growth has been based on the coal mining industry and its economic renewal during the 1970's. The industry, which was initially centred near Sparwood, has spread, or is spreading, throughout the Elk Valley. A more detailed description of the industry and its expansion appears in Chapter II.

The major beneficiaries of this coal development have been the City of Fernie, the District of Sparwood and the District of Elkford. Meetings among Mayors and administrative people of Fernie, Sparwood and Elkford, as well as representatives from the Department of Regional Economic Expansion, the B.C. Ministry of Industry and Small Business Development and the Regional District of East Kootenay, determined that a study should be commissioned to identify industrial development opportunities that may be created by the many present and planned coal mining projects. Opportunities that relate to the three communities of Fernie, Sparwood and Elkford were considered to be of particular importance during the study and are the subject of this report.

OBJECTIVES AND SCOPE

Careful efforts were made during the initial phase of the study to fully understand the objectives and scope of the work required. This understanding was gained through a detailed review of the Terms of Reference; discussion of the background and issues involved with the East Kootenay Economic Development Commission; discussion with local representatives in Fernie, Sparwood and Elkford; research into the major new coal projects currently underway in the Elk Valley and the Study Team's familiarity with the area and some of the projects under construction.

Objectives

As stated in the Terms of Reference, the objective of the study was:

> "...to identify possible industrial development opportunities for the area encompassing Elkford, Sparwood and Fernie, as a result of the development of the coal mining projects, and to assess the type and level of infrastructure that needs to be available to permit these communities to capture any identified opportunities."

The Terms of Reference further stated that the study would consist of two parts, namely:

- Part I - Industrial and Service Opportunity Analysis; and
- Part II - Analysis of Infrastructure Needs to Accommodate any Opportunities Identified.

Research into the study requirements and the Study Team's understanding of the industrial development opportunities in the area of concern enabled the above objectives to be refined. Thus, in addition to responding to the objectives stated in the Terms of Reference, the work program also responded to the following goals:

- to identify and compare coal company purchase categories with general sources of supply;
- to carry out discussions with appropriate coal mining personnel, and other parties with required expertise, to refine the broad opportunity areas;
- to assemble a "shopping list" of most promising activities suitable for local service or manufacture; and

- to assess briefly the infrastructure requirements of each of the opportunities and constraints, if any, imposed on development by current Valley infrastructure.

Scope

The work focussed on industrial development opportunities which have occurred due to coal mining development in the Valley. Specifically, commercial, retail and professional activities which are direct effects and which have occurred or eventually will occur, were beyond the scope of the study. However, "spin-off" opportunities arising from coal mine expansion, were to be pursued to the extent that they appeared particularly promising.

The size and socio-economic characteristics of the three communities tended to suggest that promising opportunities may be service oriented in nature. Initial research was directed towards the service types of opportunities, with only a secondary interest in manufacturing opportunities. However, for reasons which are fully explained in Chapter III, the service opportunities were found to be generally less promising than the manufacturing opportunities.

It was recognised that the three communities may lack certain infrastructure which would inhibit them from taking full advantage of identified opportunities. The thrust of the infrastructure review was to identify the basic locational and servicing needs of potential businesses and to assess the infrastructure constraints which might impact on these businesses.

Finally, the scope of the work precluded detailed feasibility assessments of identified opportunities. The study was to identify possible opportunities rather than to assess their feasibility. Study output was intended to be used as the basis for later feasibility assessments of the most optimistic opportunities.

APPROACH

The work was carried out in a manner designed to take maximum advantage of existing information and to identify realistic opportunities for further study as efficiently as possible. Specifically, the following tasks were undertaken as part of the study:

- visits to the Study Area to collect relevant data and information and to meet with local organizations and individuals in the communities of the Elk Valley;

- contact with a variety of organizations and individuals with a knowledge of existing and planned coal mining activity in the area;

- analysis of available data and information concerning categories of mine purchases relative to sources of supply, to identify potential local opportunity areas;

- synthesis of opportunity areas identified qualitatively to "short-list" commercial businesses exhibiting a reasonable probability of success; and

- evaluation of Elk Valley infrastructure relative to commercial opportunities, to eliminate commercial prospects which are less likely to succeed based on available services.

During the course of the work and following the initial research carried out, it became evident that purchasing information in the form originally anticipated was not available to the consulting team. The primary reason for the shortage of useable data is that the coal mines themselves regard detailed purchasing information as confidential. Additionally, at least one mine operation prefers to make its summary listing available through the Mining Association of Canada.

It is important to note that a change in approach to the study was proposed and agreed to as a result of the above-mentioned situation regarding purchase list data. Instead of the quantitative analysis of purchasing lists and associated data which was originally planned, the consulting team carried out a qualitative evaluation to identify and assess 'spin-off' opportunities from the coal mining sector. Important input into this process was provided in the form of expertise and opinions by individuals with purchasing responsibilities within the mining companies themselves. Additionally, information and opinions were also collected from suppliers, and the results of a comparison between mining company purchase categories and supply sources were utilized.

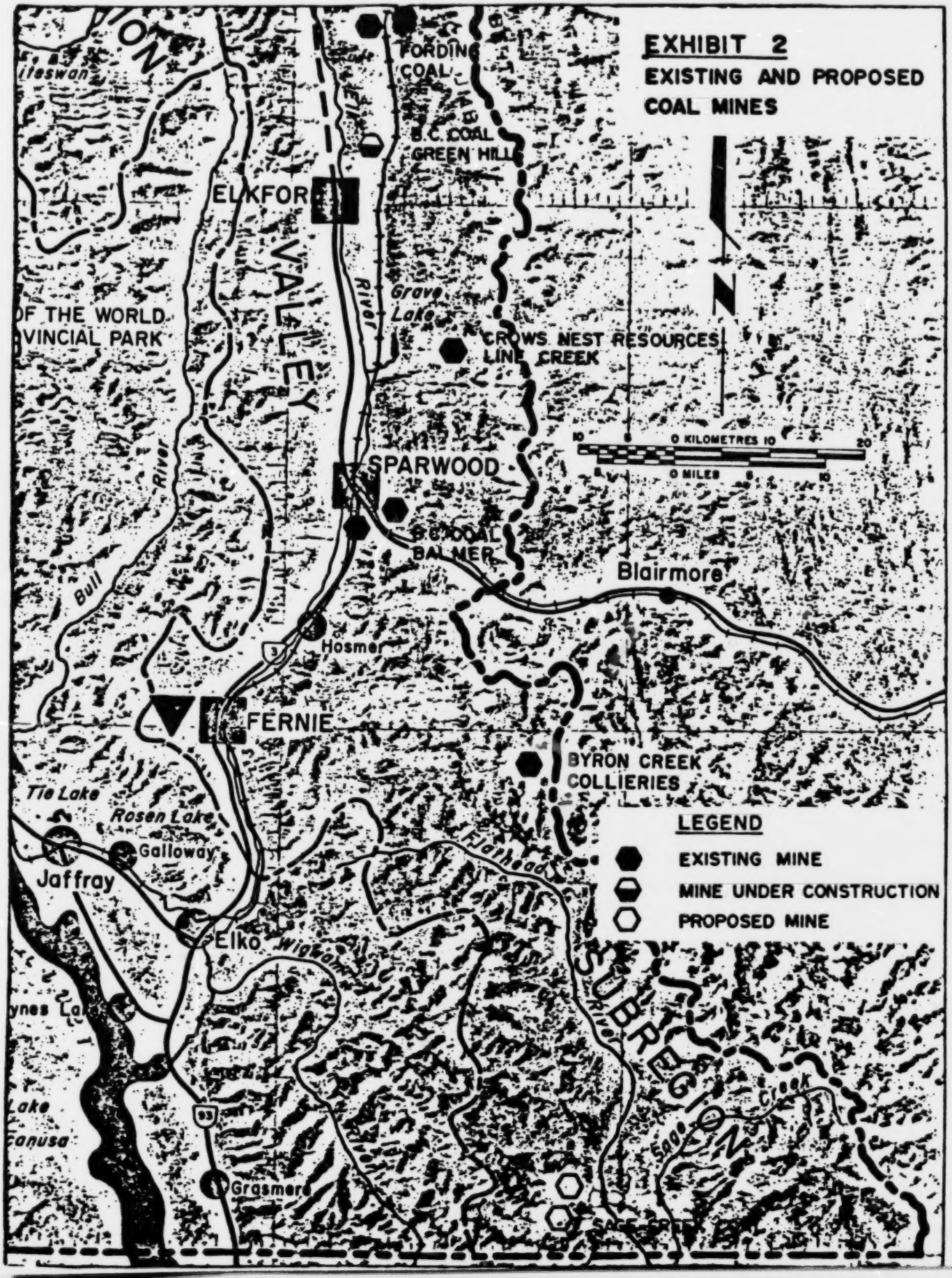


EXHIBIT 2
EXISTING AND PROPOSED
COAL MINES
FORDING COAL
B.C. COAL GREEN HILL
ELKFORD
VALLEY
River
Grave Lake
CROWS NEST RESOURCES LINE CREEK
SPARWOOD
B.C. COAL BALMER
Blairmore
Hosmer
FERNIE
BYRON CREEK COLLIERIES
Tie Lake
Rosen Lake
Galloway
Jaffray
Elko
Wigwam
Fishhead
SUBREGION
Sage Creek
Grasmere
Bull River
0 KILOMETRES 10 20
0 MILES 5 10
LEGEND
EXISTING MINE
MINE UNDER CONSTRUCTION
PROPOSED MINE

II CURRENT AND PROJECTED ELK VALLEY MINING ACTIVITIES

The Elk Valley area of British Columbia is the location of four operating coal mines, one which has recently been opened. Additionally, one mine is currently under construction and one proposed mine is in the advanced stages of planning. The coal production of this area represents virtually all of B.C.'s output at the present time and will continue to represent a majority of B.C.'s production for the forseeable future.

This chapter presents an overview of current and realistically projected coal mining activities in the Elk Valley. It also includes a discussion of projected employment and population effects in the communities of the Valley.

CURRENT MINE OPERATIONS

The locations of mines which have been operating in the Valley for some time are shown in Exhibit 2, opposite. The operators include:

- B.C. Coal Ltd;
- Fording Coal Limited; and
- Byron Creek Collieries Limited.

The production from these mines amounted to some 11.2 million tonnes in 1981. The predominant share of this tonnage was coal produced for coking purposes. However, thermal coal production is increasing and is expected to represent a significant portion of total production from the area by 1991.

The truck and shovel open-pit mining configuration is the dominant mode of production. However, B.C. Coal does operate an underground hydraulic mine adjacent to its main open-pit operation. Each of these mining

EXHIBIT 3

ELK VALLEY SUB-REGION COAL PRODUCTION FORECAST 1981-91
(in million tonnes)

	1981	1986	1991
Fording Coal (coking and thermal)	3.0	6.1	6.1
B.C. Coal (coking and thermal)	7.0	10.2	10.2
Crows Nest Resources (coking and thermal)	-	2.7	2.7
Byron Creek (thermal)	1.2	3.6	3.6
Sage Creek (thermal)	-	2.2	2.2
Total	11.2	24.8	24.8

Source: Novacorp Consulting Inc.

companies is expanding, or plans to expand, its output. These expansions are dealt with in the following section.

In addition to the above operators, Crows Nest Resources Limited recently shipped its first load of coal from its Line Creek mine. This mine is substantially complete and expects to be in full production by 1984, at a rate of approximately 2.7 million tonnes per year (mtpy) of both coking and thermal coal.

CURRENT OUTPUT EXPANSIONS

The largest output expansion underway in the Elk Valley is the new B.C. Coal Greenhills mine which is currently under construction near Elkford. Exhibit 2, opposite Page II.1, shows the location of this mine which will produce primarily thermal coal and is expected to reach full production of 1.8 mtpy by 1983.

Other expansion activities in the area include upgrading and increased production for both Fording Coal and B.C. Coal's Balmer operations which are expected to increase production at these two mines alone to 14.5 mtpy from the current 10.0 mtpy of coking and thermal coal. Exhibit 3, opposite, provides a summary of current and expected production for the Valley producers.

PROJECTED OUTPUT EXPANSIONS

Exhibit 3 also summarizes the projected expansion plans of Byron Creek and the projected construction of the new Sage Creek Coal Limited mine. These two mines are both thermal projects with expected production of 5.8 mtpy by 1986. The expansion plans include a tripling of Byron Creek's current capacity and the building of an entirely new mine at Sage Creek. The location of Sage Creek is shown in Exhibit 2, opposite Page II.1.

EXHIBIT 4

ELK VALLEY AREA EMPLOYMENT AND POPULATION FORECASTS 1981-91

	1981	1986	1991
Direct Mine and Other Basic Sector Employment	4,810	7,115	7,115
Non-basic Sector Employment	1,863	3,558	4,625
Total Elk Valley Workforce	6,673	10,673	11,740
Elk Valley Population (low)	16,717*	22,385	24,625
Elk Valley Population (high)		23,665	26,755

* 1981 Census

Source: Novacorp Consulting Inc.

The 1986 and 1991 production figures shown in Exhibit 3 are based on the following assumptions:

- World coal markets, especially in the Pacific Rim area, continue their orderly expansion;
- B.C. producers continue to increase their penetration of these markets; and
- Coal handling facilities, including rail capacity and tidewater load-out capacity, expand in an orderly fashion to accommodate the increased production.

If any of the above assumptions are not completely fulfilled, then total production from the Valley area could vary from the stated projections for 1986 and 1991.

EMPLOYMENT AND POPULATION EFFECTS

The mining expansion and construction activities outlined above will have significant socio-economic effects on the Valley. Elk Valley employment and population levels to 1991 are shown in Exhibit 4, opposite. These levels are based on the coal production estimates described in Exhibit 3. The figures in Exhibit 4 suggest that the population of the Valley area will increase significantly by 1991. High and low population estimates are included to provide a range of likely population increases. As such, the estimates should be regarded as approximate boundaries which could vary due to a variety of uncertainties.

It is clear that the population growth of the Valley area will provide significant commercial and consumer business service opportunities over the next ten years. These opportunities are beyond the Terms of Reference of this study. However, the figures illustrate the lag effect for

substantial commercial investment resulting from resource investment which, for the Valley area, is occuring over a decade after Fording Coal sold the townsite at Elkford to the District of Elkford for $1.00.

III RESEARCH SUMMARY

This chapter describes the approach, research and general results of work associated with opportunity identification. Research was carried out in the following stages:

- comparison of mining company purchase categories and source of supply categories;
- review of recent, relevant studies, interviews with mine personnel and interviews with other organizations;
- review of the B.C. Procurement Policy for Major Project Developments and review of mining company procurement policies; and
- review of current industrial development in the Elk Valley area.

The objective of these research activities was to develop a "shopping list" of development opportunities for the Valley area which could justify further detailed feasibility studies. The research itself was used to uncover and identify potentially promising business prospects. The general flavor of these opportunities is discussed in the last section of this chapter.

Each of the principal research stages is discussed in the following paragraphs.

MINE PURCHASE/SUPPLY INFORMATION

Attempts were made to collect mining company purchasing information. However, as described earlier, detailed data was not consistently

available from the companies involved. A quantitative supply/demand analysis of specific purchases was therefore not possible. Nevertheless, a reasonable amount of general purchasing information was made available. This, along with discussions concerning purchasing techniques and the types of purchases made, provided the Study Team with insight into this aspect of coal mine operations in the Elk Valley.

The equipment used by each mine usually falls into one of two categories of engineered equipment, namely mobile or stationary. Examples of the former include trucks and shovels, while examples of the latter include the process plant and load-out station.

Purchasing information research was supplemented by interviews with mine purchasing personnel. The objectives of the interviews were to add to the Study Team's understanding of the purchasing information and to explore both the opportunities for outside servicing and maintenance of mine equipment.

Service oriented opportunities which do spin-off from the mining industry are expressly mentioned in the Terms of Reference as being of particular interest. Unfortunately, these types of opportunities are relatively unattractive from an economic development perspective for the reasons listed below:

- Mines are generally self-sufficient. This is especially true at the original mine sites of Fording and B.C. Coal. The desire for self-sufficiency is exemplified by B.C. Coal's large and complex component rebuild shop.

- As a result of their agreements with their trade unions, the mining companies are limited in the extent to which they can contract maintenance to outside firms. These agreements generally preclude most outside service activities.

- Replacement parts orders for engineered equipment tend to flow back to the equipment dealers which supplied the equipment or to the original equipment manufacturers (OEM's). Part of the explanation for this continuing flow is the warranty conditions for the equipment which specify OEM parts after the initial purchase. All of these replacement parts tend to be installed by mine maintenance personnel.

In general, service industry development opportunities associated with the mining industry in the Elk Valley are low in potential.

STUDY RESEARCH AND INTERVIEWS

Recent reports pertaining to the study area were reviewed, and interviews with various people and groups associated with the coal mining industry were carried out. Results of these tasks are presented in the following paragraphs.

Recent Studies

A list of the studies reviewed during the course of the project is presented in Appendix A. The Terms of Reference specifically requested that the proceedings of the "Opportunities in Mining Conference Record" (held in April 1981) be reviewed. This conference represented the first formal attempt by the Canadian mining industry to encourage Canadian manufacturers and suppliers to increase the number of products and services they supply to the mining industry. The focus of the conference was the Canadian mining industry in general. However, B.C. Coal was a major participant in the conference and supplied purchasing information on a confidential basis to be used in a computer model designed to simulate the buying habits of a typical Canadian mine.

Most of the other studies reviewed were useful principally for background material during the study. The exception is the "B.C.

EXHIBIT 5

B.C. PROCUREMENT POLICY

PURPOSE:

Provide specific guidelines on the British Columbia Government's procurement policy for major private and public projects.

PROCUREMENT POLICY OBJECTIVES:

- ☐ To promote the growth and diversification of the British Columbia industrial and service sector supply base and the enhancement of the free flow of goods and services in the Canadian market. To create long term income and employment benefits for all British Columbians and Canadians.
- ☐ To identify opportunities, on a timely basis, for the development of the competitive productive potential of the suppliers of materials, equipment, engineering and other services to developers of projects in British Columbia.
- ☐ To identify and reduce barriers to the development of competitive supply sources in British Columbia.
- ☐ To improve access for British Columbia firms to projects in other provinces.
- ☐ To ensure that domestic sourcing contributes to the development of an innovative core of project suppliers, with an international competitive capability.

Procurement Policy for Major Project Developments" which is discussed later in this chapter.

Interviews

A list of interviews conducted and persons contacted during the study may be found in Appendix B. Information and data collected in this manner were used primarily as resource material and included contact with the Machinery and Equipment Manufacturers' Association of Canada (MEMAC) and with Wright Engineers Limited. These interviews provided useful information concerning the current ability of Canadian industry to supply equipment to the coal mining industry.

B.C. PROCUREMENT POLICY

The B.C. Procurement Policy was reviewed to assess its possible effect on the Elk Valley area coal mining industry. Major objectives of the policy appear in Exhibit 5, opposite. A summary of the policy statement is provided in Appendix C.

Meetings were also held with representatives of several mines and the Western Mining Purchasing Managers Group (WMPMG) to determine the general stance of interviewees on increasing B.C./Canadian content in the various projects. The WMPMG policy on this subject may be found in Appendix D. Most mines in the Valley area seem to adhere to some form of the B.C./Canadian content commitment as stated by the WMPMG. The WMPMG policy on B.C./Canadian content appears to be within the spirit of the B.C. Procurement Policy.

Most mining companies involved in the Elk Valley stressed that it is always to their advantage to have local sources of supply wherever possible. The ideal situation would be to have every supplier located within the area of the mine. However, this situation is generally not economically feasible, especially for the manufacturers of engineered equipment. The mining companies do not consider it to be in their

EXHIBIT 6

ELK VALLEY
SOURCES OF SUPPLY BY TYPE OF PURCHASE

START-UP EQUIPMENT AND SERVICES

Purchase Category		Source of Supply A	B	C	D	E	F
• MOBILE EQUIPMENT	- Draglines	X	X				
	- Shovels	X	X				
	- Loaders	X	X				
	- Trucks	X	X				
	- Drills	X	X				
	- Mobile Cranes	X	X				
• STATIONARY EQUIPMENT	- Conveyors	X	X				
	- Conveyor Housing Tubes	X	X				X
	- Transformers	X	X				
	- Electrical Cable/Couplings	X	X		X		X
	- Buildings & Structures					X	X
	- Miscellaneous Equipment	X	X		X	X	X
• PREPARATION PLANT EQUIPMENT	- Breakers	X	X				X
	- Heavy Media Bath	X	X				X
	- Cyclones	X	X				X
	- Froth Flotation Cells	X	X				X
	- Driers	X	X				X
	- Separators	X	X				X
	- Centrifuges	X	X				X
	- Screens	X	X				X
	- Filters	X	X		X	X	
	- Pumps	X	X		X	X	
	- Conveyors	X	X			X	X
	- Bins				X	X	X
	- Hoppers				X	X	X
	- Chutes				X	X	X
	- Electrical Equipment		X		X	X	X
• MISCELLANEOUS SERVICE EQUIPMENT	- Tractors	X	X				
	- Graders	X	X				
	- Trucks	X	X				
	- Welders	X	X		X		
	- Compressors	X	X		X		
	- Cranes	X	X		X		
• SERVICES	- Feasibility Studies						X
	- Engineering						X
• REPLACEMENT PARTS FOR	- Compressors	X	X	X	X		
	- Conveyors	X	X	X	X		
	- Drill Bits	X	X	X	X		
	- Drill Rigs	X	X	X	X		
	- Drive Components	X	X	X	X	X	
	- Mobile Equipment	X	X	X	X	X	
	- Preparation Plant Equipment	X	X	X	X	X	
	- Pumps	X	X		X		
• SUPPLIES	- Petroleum Products			X			
	- Rubber Products		X				
	- Office Equipment	X	X		X	X	
	- Safety Equipment	X	X		X	X	
	- Camp Material	X	X		X	X	
Number of Purchase Categories Covered by Source of Supply		39	40	8	22	15	19

SUPPLY SOURCE LEGEND

A - Original Equipment Manufacturers (OEM's)
B - OEM Dealers
C - Agents
D - Distributors
E - Independent Local Businesses
F - Construction and Consulting Firms

interest to subsidize local businesses merely to secure a local source of supply. Esso Resources Canada Limited has had great success in working with small and medium sized businesses to develop Canadian supply sources. These businesses, however, must be able to sustain themselves once a particular product for a local mine has been developed.

LOCAL MINING EQUIPMENT SUPPLY

Interviews with mine purchasing personnel suggest that the ultimate source of supply for mines in the Elk Valley is located in southern Alberta including Calgary, rather than southern B.C. and Vancouver. This supply orientation appears to be a result of the transportation links and services to the Valley from Alberta and the well established supply infrastructure in that area which supports both the Alberta coal mines as well as the oil and gas industry.

Exhibit 6, opposite, describes the principal types of purchase made by the mine operations and the types of supply sources which are used. This table clearly shows that there is already a variety of options available to the mining companies when purchasing supplies and services. It also demonstrates that original equipment manufacturers and their dealers predominate in supplying the mining companies in the Elk Valley.

To the extent that supplies are acquired locally, they are generally purchased from B.C. based dealers and agents. Local suppliers are currently expanding as new mines develop and existing ones expand. Once this current supplier expansion phase reaches maturity, new business opportunities will likely be oriented towards commercial and service opportunities for the greatly expanded population of the Valley area. Comments concerning the supply of industrial land in the Valley are provided in Chapter V.

INITIAL FINDINGS

The research work carried out provided the Study Team with an understanding of the most realistic types of business opportunities in the Elk Valley which relate directly or indirectly to coal mining. The following initial findings formed the basis for much of this understanding.

- External servicing and maintenance of mine equipment is unlikely to experience significant growth since mining operations are self-sufficient and union agreements make it difficult to involve external contractors.

- Local manufacturing of mine equipment replacement parts may exhibit some potential under favourable conditions, but warranty and quality control stipulations encourage purchasing managers to access original suppliers or original equipment manufacturers for parts. Furthermore, it is likely that the economic size of a parts manufacturing plant would require sales volume significantly greater than that which could be generated in the Elk Valley alone.

- Provincial and federal encouragement to maximizing Canadian content is evident. Mining companies realize and respect this objective and support it to the extent practical. Thus, efforts to increase Canadian made parts will likely be supported and encouraged by the public sector.

- Continuing expansion of mining operations in the Elk Valley will lead to an increase in economic growth opportunities for Valley residents. New suppliers are expected to establish business there in the near-term, and this will lead to general business development as the population base increases.

The above findings indicate that economic development opportunities do exist in the Elk Valley. Some will be developed naturally as the existing population increases. Others will need to be promoted since, as they develop, they will likely replace sources of supply which are now located outside of the Valley itself.

IV PRELIMINARY OPPORTUNITIES LIST

The research previously discussed indicated that the Elk Valley is currently undergoing industrial expansion based on the coal mining industry. A variety of coal mine suppliers are currently situated, or will be situated shortly, in the area. However, research also suggests that opportunities still exist for further supplier development and special service opportunities. A discussion of the two most promising type of opportunities is provided below.

OPPORTUNITY TYPE

Industrial activity in two general areas are considered to exhibit potential for further development in the Elk Valley. These opportunity types include:

- import substitution opportunities where manufactured goods previously imported from outside the Valley area are manufactured locally; and

- special service and market development opportunities where current mine suppliers do not appear to be serving special markets and new opportunities are appearing due to new development.

Each of these opportunity areas is described briefly in the following paragraphs.

Import Substitution Opportunities

In a number of cases, the technical ability exists to manufacture parts and equipment locally used by the mining industry in southern B.C. Advantage has already been taken of some of these opportunities, such as the use of a Cranbrook manufacturer by B.C. Coal to help assemble

large haul trucks. Investigation was carried out into import substitution opportunities and specific prospects uncovered are reported on later in this chapter.

Special Market Opportunities

Business opportunities also exist in the Valley either because local suppliers are failing to provide particular parts or services, or because special market opportunities have recently opened up due to coal mine development which has taken place in the Valley. The former represents an opportunity that may be exploited by local equipment and supply dealers, while the latter represents an opportunity that may never be satisfied unless the market situation is brought to the attention of local entrepreneurs. Investigations were carried out into special market opportunities and specific prospects are identified later in the chapter.

OPPORTUNITIES WITH LIMITED PROMISE

During the course of the research activities, a number of sessions were held among Study Team members to identify specific development opportunities. Many possible ventures were rejected early due to demand or market characteristics, technology requirements, socio-economic base requirements, and other easily identified constraints. Following initial investigation and discussion, industrial development areas which were considered to exhibit a reasonable chance of success, were investigated further and are discussed later in this chapter. One opportunity, tire pyrolysis, is considered to have a relatively low chance of success when compared to others. Some significant constraints need to be overcome before it can be considered practical. However, if the obvious problems can be solved, tire pyrolysis could well be worth pursuing. For that reason, it is reviewed briefly in the following paragraphs.

EXHIBIT 7

ELK VALLEY AREA ECONOMIC DEVELOPMENT OPPORTUNITIES

Import Substitution Opportunities

- Coal Dust Supression Spray Manufacturing Plant
- Coal Load-out Equipment Manufacturing Plant

Special Market Opportunities

- Replacement Parts Warehousing
- Work Clothing Laundry Servicing and Manufacturing Plant
- Concrete Plant
- Railway Tie Mill

Tire Pyrolysis

It has been suggested that the Elk Valley area would be a suitable location for a tire pyrolysis plant due to the high volume of discarded truck tires from mining operations. Tire pyrolysis is a process whereby discarded tires are shredded and incinerated to produce the component parts of:

- Steel and cord; and
- Oil, gas and carbon black.

Several small tire pyrolysis plants are operating in Europe and, as yet, the process has yet to become an unqualified commercial success.

A 1981 study in B.C. suggested that the province could support one plant costing some $2.0 million. However, initial investigations support the location of such a plant in a more densely populated area than the Elk Valley (eg. Vancouver), due to the concentration of used tires and the prohibitive economics of transporting tires much beyond a 150 mile limit. As yet, a proposed plant of this type has failed to attract any significant financial backers. An Elk Valley plant location would likely have severe supply problems when compared to a Vancouver location and thus, this opportunity was not pursued any further. If supply constraints and costs could be overcome, the prospects of a plant in southeastern B.C. become more encouraging.

OPPORTUNITIES LIST

Exhibit 7, opposite, lists the economic development opportunities which have been identified for the Elk Valley. Brief discussion of each of these opportunities is provided below and a more detailed description and evaluation of each opportunity is provided in Chapter VI.

Import Substitution Opportunities

A comprehensive investigation of the potential for replacement parts manufacturing was not carried out due to the unavailability of consistent purchasing data. Some potential for local development in this area may exist but a significant amount of additional work would be required to carry out an appropriate investigation. However, two other import substitution opportunities were evaluated which are discussed in the following paragraphs.

Coal Dust Suppression Spray Manufacturing represents one such import substitution opportunity. A plant could be developed which would manufacture a coal dust suppressant. The suppressant is sprayed on the top of coal cars to cut down on the loss of dust during transit and, currently, this chemical is imported into the Valley area.

Coal Load-out Equipment Manufacturing represents a less obvious industrial development opportunity relative to others considered to have a reasonable chance of success. During the research phase, it was suggested to the Study Team that a major manufacturer of this equipment was looking for a B.C. facility to assemble its systems. The manufacturer wished to be well placed to serve both the southeast and northeast coal mining operations. This opportunity would likely require co-ordinated action by both the Regional District and the Elk Valley communities to secure the plant. However, success in attracting investors in this business might lead to the establishment of other manufacturing plants for various types of mining equipment.

Special Market Opportunities

Three specific industrial development opportunities were identified which can potentially take advantage of special markets which have evolved or are evolving. These are discussed briefly in the following paragraphs.

Replacement Parts Warehousing is an operation which would have minimal economic impact but which is, nevertheless, a distinct opportunity. Some replacement parts used by the mining companies are not stocked by local dealers or suppliers because original equipment manufacturers (OEM's) have not established a local presence. These parts must be stocked directly in mine warehouses or be supplied when needed as quickly as possible from the nearest OEM supply centre. A warehousing operation to stock these parts locally appears to offer potential. The warehouse would likely have to represent several OEM's to be successful.

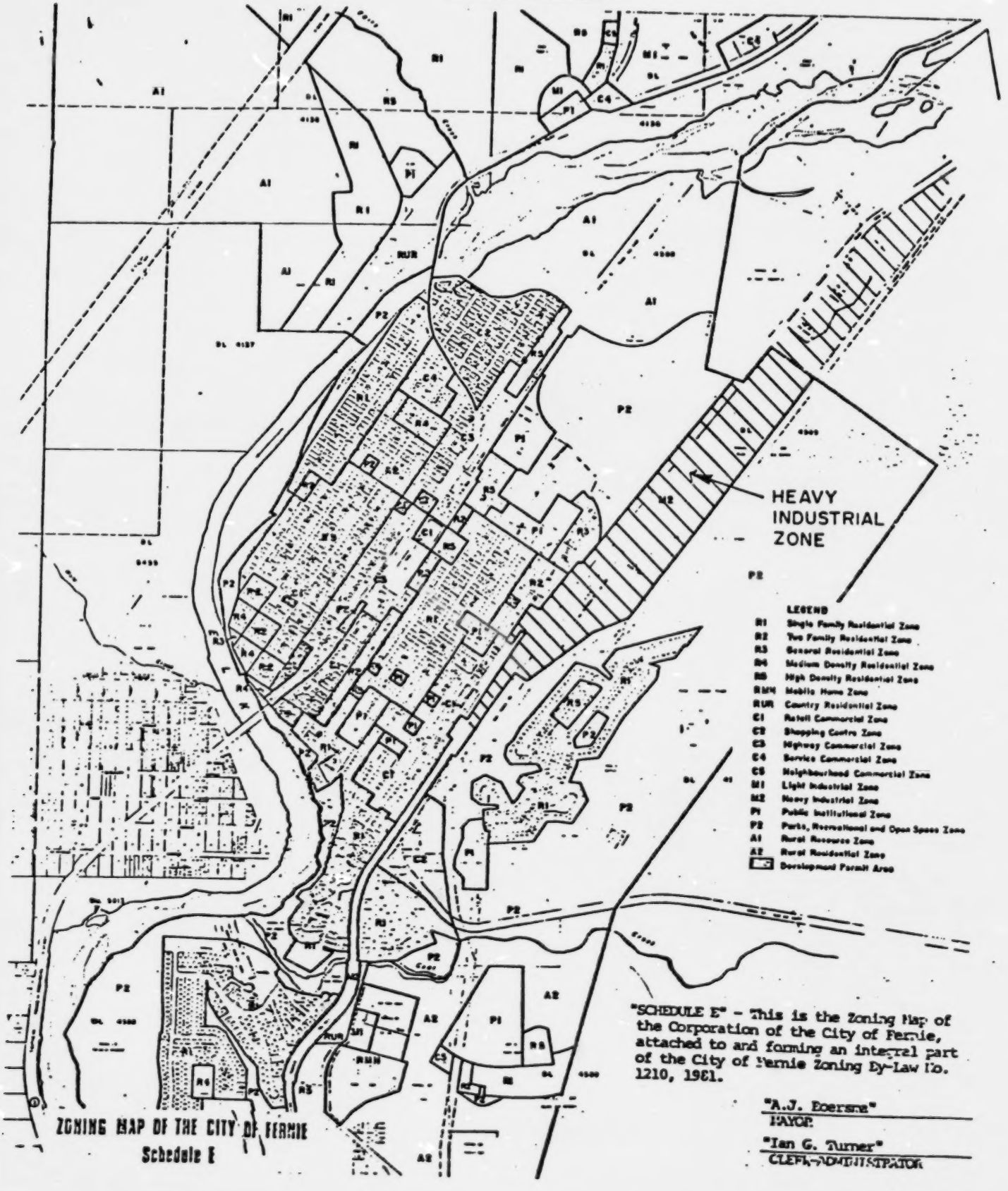
Work Clothing Laundry Servicing and Manufacturing represents both a service oriented and a manufacturing oriented opportunity, although the former offers the most potential. A laundry would collect, clean and deliver a continuous supply of work clothing to the mines. Once the laundry was established, it might then prove feasible to begin local manufacturing of some work clothing items.

Concrete Plant Development represents an opportunity to consolidate the various smaller plants which currently exist in the Valley area. Construction of a semi-portable plant to supply the concrete needs of the entire Valley and to produce some specialty concrete products could be viable. The plant could take advantage of the demand generated by the residential and commercial building boom which is taking place in all Valley communities. If such a development took place, negative impact would likely be felt by the existing plants since consolidation is considered to be necessary for a viable operation.

Railway Tie Mill Development is a temporary opportunity for local manufacturers to supply the massive western Canada rail rebuilding projects which are planned over the next decade. It has been suggested that the Elk Valley has a suitable wood supply to manufacture railway ties for a portion of this project. The timing and realization of this opportunity will depend entirely on the timing and magnitude of the rail improvement projects. The suitability of locally available timber relative to railway needs, needs to be evaluated prior to active pursuit of this type of industrial activity.

EXHIBIT 8

FERNIE ZONING MAP


HEAVY INDUSTRIAL ZONE
LEGEND
R1 Single Family Residential Zone
R2 Two Family Residential Zone
R3 General Residential Zone
R4 Medium Density Residential Zone
R5 High Density Residential Zone
RMH Mobile Home Zone
RUR Country Residential Zone
C1 Retail Commercial Zone
C2 Shopping Centre Zone
C3 Highway Commercial Zone
C4 Service Commercial Zone
C5 Neighbourhood Commercial Zone
M1 Light Industrial Zone
M2 Heavy Industrial Zone
P1 Public Institutional Zone
P2 Parks, Recreational and Open Space Zone
A1 Rural Resource Zone
A2 Rural Residential Zone
Development Permit Area

ZONING MAP OF THE CITY OF FERNIE
Schedule E

"SCHEDULE E" - This is the Zoning Map of the Corporation of the City of Fernie, attached to and forming an integral part of the City of Fernie Zoning By-Law No. 1210, 1981.

"A.J. Boersma"
MAYOR

"Ian G. Turner"
CLERK-ADMINISTRATOR

V MUNICIPAL INFRASTRUCTURE ASSESSMENT

The realization of any of the projects identified in Chapter IV will depend on municipal service infrastructure requirements of the projects and the availability of industrial land in the Valley communities. The existing infrastructure and related constraints on specific industrial development opportunities is discussed in this chapter.

FERNIE INFRASTRUCTURE

Fernie is generally characterized by an adequate amount of serviced industrial land relative to the opportunities identified. Rail access is available to a portion of this land and the water supply of the community is generally good. There appears to be no major infrastructure constraints in Fernie to development of the above-mentioned opportunities.

Exhibit 8, opposite, is Schedule E of the Zoning By-Law for Fernie. The M2 heavy industrial zone shown will be provided with roads and servicing under a recently announced Industrial Development Subsidiary Agreement loan of approximately $1.1 million. Sufficient serviced land will eventually be available under this plan to accommodate business prospects. Road access to the property is by level crossing, which will result in increasing delays as unit coal car traffic on the rail line increases in the future.

Water supply for the city is currently being upgraded with a new supply line which can provide a good level of water service. City sewerage facilities require considerable upgrading and new treatment works should be constructed.

All of the opportunities identified are permitted uses of the M2 heavy industrial zone.

DISTRICT OF
SPARWOOD

OFFICIAL COMMUNITY PLAN

Existing Land Use

LEGEND:

- Residential Small Holding
- Mobile Home Park
- Single Family
- Multiple Family
- Institutional
- Commercial
- Industrial-Highway Comm.
- Heavy Industrial
- Reserve
- Agricultural Lands

Proposed Land Use

- Town Centre
- Residential Low Density
- Residential High Density
- Rural Resource Zone
- Institutional
- Service Commercial
- Local Commercial
- Light Industrial & Highway Comm.
- Heavy Industrial
- Parks & Recreation
- Greenbelt

SCHEDULE "A"

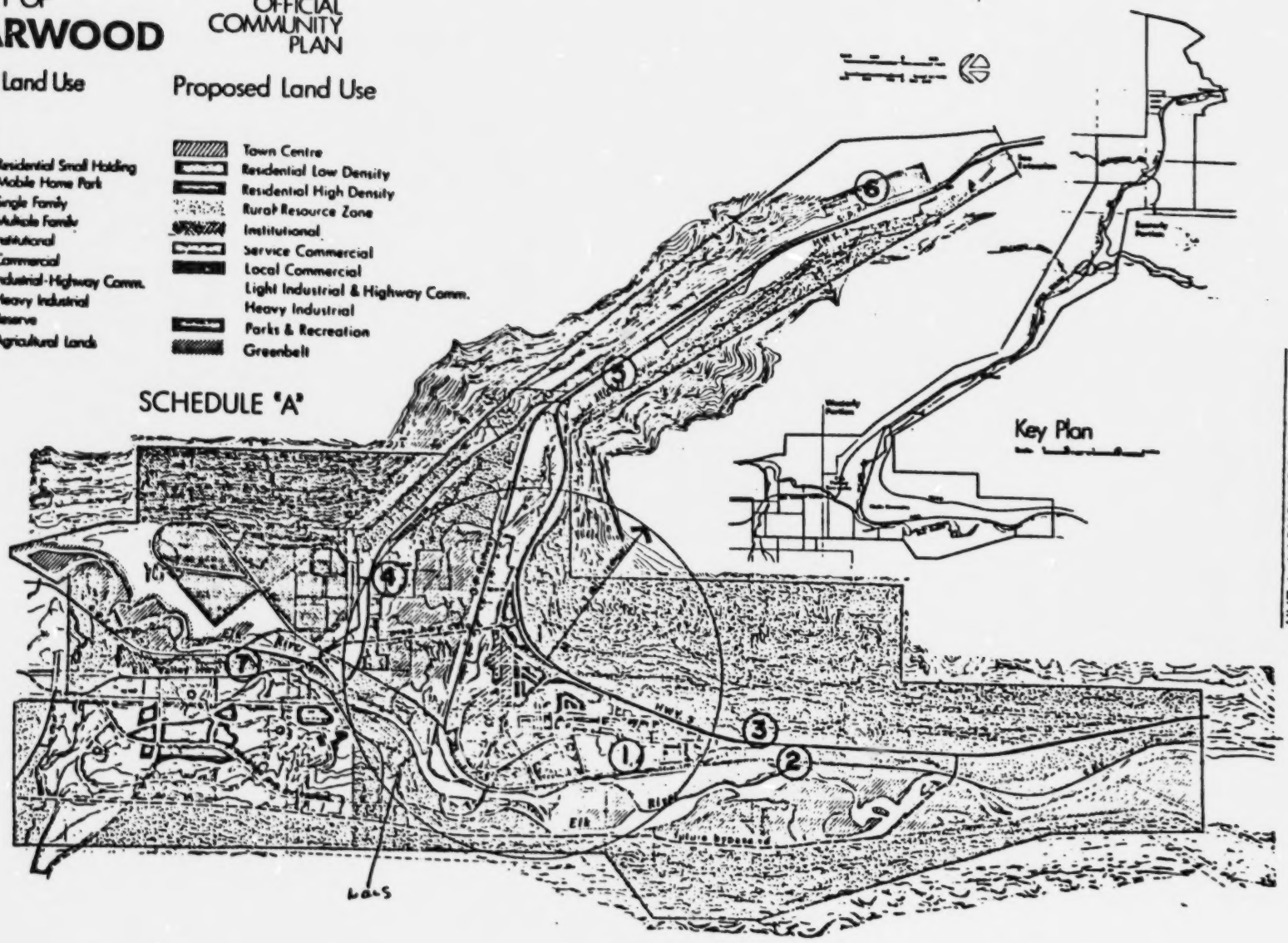


EXHIBIT 9

SPARWOOD COMMUNITY PLAN

SPARWOOD INFRASTRUCTURE

Sparwood is presently short of serviced industrial land and industrial land which is accessible by rail. If increasing demand for this type of land is experienced, Sparwood may need to change its current private sector approach to development to one which is more controlled by the public sector.

Much of the land use in the District of Sparwood is constrained for a variety of legislative and physical reasons, including the following:

- protection under the Agricultural Land Reserve, although exemptions have been granted on several occasions in the past;
- ownership and leasing of large land blocks;
- severe topography and areas of slope instability;
- location on the Elk River and Micheal Creek flood plains, although some of this land could be flood protected, but restrictive covenants limit land use adjacent to water courses; and
- availability of piped water and sewer systems only within the main townsite, which has limited the capability for expansion.

Exhibit 9, opposite, shows the areas identified in the Community Plan as being desirable for industrial use. Specific areas on the exhibit are discussed below.

- Areas 1 and 2 - Existing developed areas zoned for light industrial - highway commercial uses.

- Area 3 - Area planned for immediate development consisting of some 10 to 12 acres. Piped water and sewer services can be extended to this area. Power and natural gas are readily available and good access to Highway 3 is provided. Rail service is not planned since a rail crossing of the highway is not expected to be acceptable.

- Area 4 - Area suitable for light and medium industry. This land is not serviced with utilities but highway access would be available. Rail service could be provided. Local domestic services (wells and septic tanks) exist at some locations.

- Areas 5 and 6 - Area suitable for heavy industrial use under the provision that air and water pollution are avoided. Servicing would be required. Highway access is good and rail service can be provided.

- Area 7 - Upper plateau area with some light industrial - highway commercial potential. Presently this area is not serviced and rail service is not available.

ELKFORD INFRASTRUCTURE

Elkford has no shortage of industrial land relative to the requirements of identified opportunities. A new industrial park is being developed under an Industrial Development Subsidiary Agreement loan of approximately $2.2 million. It is recognized that roads and servicing will need to be extended to accommodate projected industrial land uses. Industrial park land does suffer from a lack of rail service and is characterized by relatively steep ground slopes. Some serious constraints to specific types of development are evident.

EXHIBIT 10

ELKFORD COMMUNITY PLAN

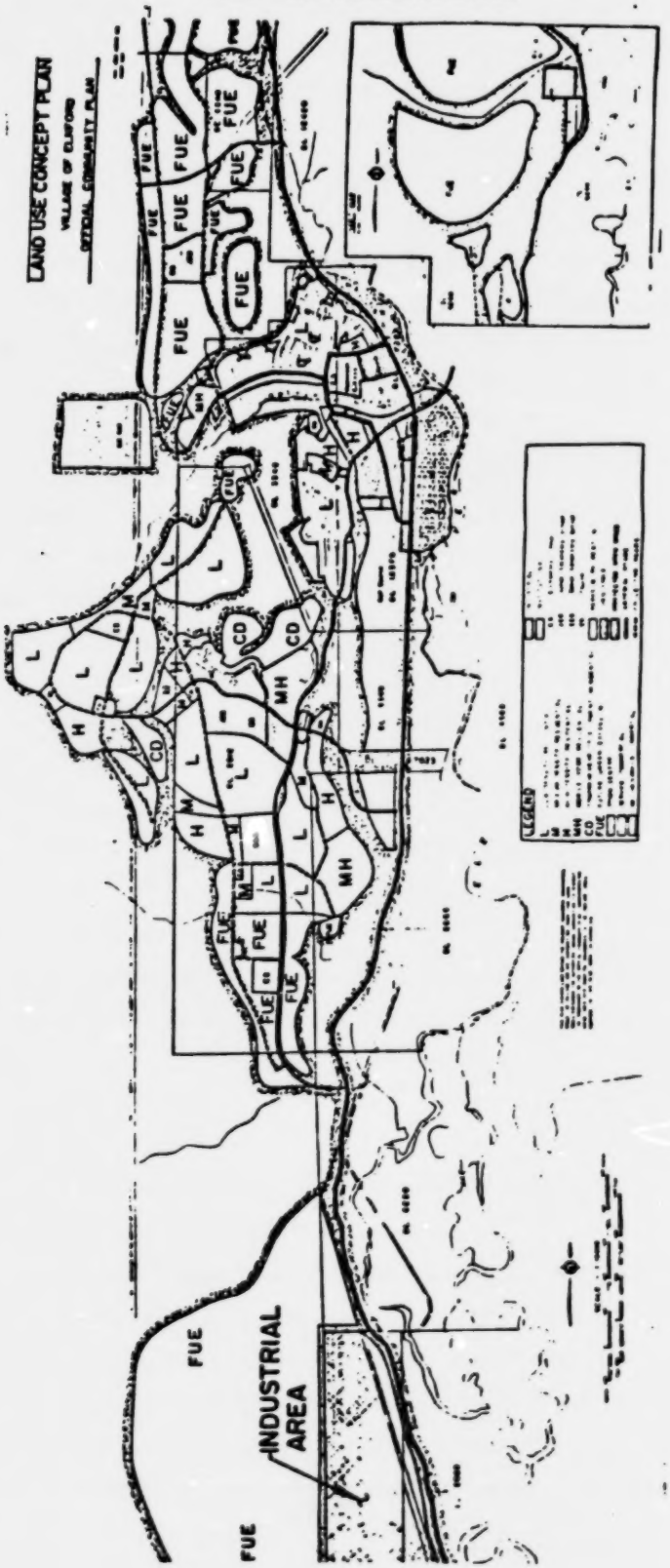


Exhibit 10, opposite, identifies intended land uses in Elkford. The following comments elaborate on industrial land development:

- Floodplain land along the Elk River and Boivin Creek has not been identified for industrial use because landfilling and dyking would be required to meet floodproofing regulations of the Ministry of Environment. This land may also present groundwater problems;

- The Elk Valley railway extension from Sparwood serves coal mining areas and is not expected to be extended to the townsite; and

- Water supply, sewage disposal and drainage systems are being upgraded to meet the present and future needs of the community.

TRANSPORTATION INFRASTRUCTURE

The transportation infrastructure in the Valley is excellent from the rail and road points of view. Fernie and Sparwood are both located on Highway 3 which is a major east-west provincial highway. Highway 3 connects the Valley with Cranbrook in the west and Alberta through the Crowsnest Pass in the east. Elkford is located north of Sparwood on a paved highway extension. This highway is a potential route north to Alberta and Calgary through the Kananaskis area. However, the highway currently ends just north of Elkford.

The Elk Valley is served by the Canadian Pacific Railway. Its line runs south from Golden along the Columbia River and swings into the Valley at Elko. The C.P. line ends at the Fording Coal operation just north of Elkford. Fernie and Sparwood are both situated on the rail line. However, Elkford is not, as the line makes its way to the

Fording Coal operation along the Fording River, rather than the Elk River. There are no current plans to extend a spur line to Elkford.

The closest major airport is situated at Cranbrook and has daily jet service to both Vancouver and Calgary. The Valley communities have recently completed the basic planning for an airport in the Elk Valley near Sparwood. It is not clear when the airport will be built, however, it should eventually offer direct turbo-prop service to Calgary and Lethbridge, and possibly Cranbrook.

In summary, the transportation infrastructure in the Valley is well developed and transportation is not considered to be a constraint for the opportunities identified.

VI OPPORTUNITY EVALUATION AND RECOMMENDATIONS

It is the conclusion of the Study Team that some of the opportunities described earlier exhibit better chances of success than do others. A number of the identified opportunities warrant detailed feasibility study to determine their expected viability.

APPROACH TO OPPORTUNITY EVALUATION

A specific set of criteria was developed and applied to rank the most promising industrial development opportunities for the Elk Valley. The ranking criteria established are listed below:

- The complexity of the opportunity;
- The probability that the opportunity would proceed without further attention from the Economic Development Commission;
- The degree of co-ordination required between various government agencies and/or municipalities in the Valley area;
- The level of government assistance that may be available to and/or required by a project developer; and
- The projected time frame of development.

These criteria were applied qualitatively to the opportunities identified to determine those which offered some scope for further detailed feasibility studies. The criteria are discussed more fully below.

Complexity

Each of the identified opportunities have varying levels of complexity in assembling all of the necessary components for the project. The high complexity opportunities require a large number of components to be successfully assembled to allow the project to proceed. Conversely, the low complexity opportunities require the successful assembly of a lesser number of components. Generally, the greater the complexity of the opportunity, the less its chances of being successfully pursued.

Probability

This criteria attempts to measure the likelihood of the opportunity proceeding without further attention from the Economic Development Commission. The opportunities with lower probabilities will require assistance from the Commission if they are to proceed, while the high probability opportunities are not likely to require assistance. Generally, the low probability opportunities are not ones which are readily apparent to the casual observer. These opportunities will require the active promotion of the Commission to be successfully established.

Co-ordination

Several of the identified opportunities require a low degree of co-ordination between the various levels of government, in order for the projects to proceed. The co-ordination required for some opportunities can include agreement on the type of industrial development assistance required, agreement on possible changes in zoning to allow development of preferred sites, and agreement on the basic thrust of development in the Valley so that each municipality shares in the benefits. Generally, the lower the amount of co-ordination required, the greater the likelihood of the project proceeding.

EXHIBIT 11

QUALITATIVE CRITERIA APPLICATION

CRITERIA

OPPORTUNITY	Complexity	Probability	Co-ordination	Assistance	Time Frame
Coal Dust Spray	Low	High	Low	Low	Short
Load-out Equipment	High	Low	High	High	Long
Parts Warehousing	Moderate	Medium	Low	Low	Short
Work Clothing	Moderate	Low	Low	Moderate	Short
Concrete Plant	Moderate	Medium	Low	Low	Short
Tie Mill	Low	Low	Moderate	Low	Long

Assistance

This criteria addresses the question of the type and amount of industrial development assistance that an opportunity may require to allow the project to proceed. The assistance may take the form of forgivable or low interest loans, development grants or municipal infrastructure development. The assistance criteria is especially important to an opportunity that may have to overcome supply or market constraints associated with a Valley location. Generally, a low level of required assistance will tend to aid those opportunities in becoming concrete development projects.

Time Frame

Each of the identified opportunities has a differing development timetable. Some of the opportunities can commence within a relatively short time frame, while others will require a long lead-in process. The time frame criteria is dependent to some extent on the other criteria and measures the overall ease of development of each project. In addition, other factors may impact on the length of development for each project, such as the requirement for other projects to proceed before the identified opportunity can proceed. Generally, a shorter time frame assessment increases the likelihood of the project proceeding.

ASSESSMENT OF OPPORTUNITIES

The results of applying the qualitative criteria to the development opportunities are shown in Exhibit 11, opposite. The exhibit is not a quantitative ranking process, but rather one that shows relative differences between the opportunities in each criteria category. The conclusions which were developed based on this assessment process are presented below.

Coal Dust Spray

The coal dust suppression spray manufacturing opportunity represents a project with low complexity and a high probability of proceeding. The key variable in determining the project will be an assessment by the major product supplier as to whether volume in the Valley is great enough to support a local plant. If volume is great enough, then the plant will proceed in a fairly short time period. If the volume is not great enough, the decision will be deferred and the product will continue to be imported into the Valley.

If the project proceeds, it will require low levels of government co-ordination and probably minimal assistance. This opportunity is not a good candidate for a detailed feasibility study, as its major determining variables are fairly straightforward. The plant will likely proceed when the major supplier of the product determines Valley usage is great enough to warrant building one.

Load-out Equipment

Coal load-out equipment manufacturing represents an opportunity that is complex and that has a low probability of proceeding. The major concern with this project is whether a plant located in the Elk Valley could also competitively service the north- eastern B.C. and Alberta coal fields. A detailed feasibility study will be required to investigate the competitiveness of a Valley location with a location in Vancouver or Calgary.

The project will also require a high level of government co-ordination and assistance. The latter factor will be especially important if the Valley location proves to be at a competitive disadvantage compared with other locations. Also, the time frame of the project will be fairly long as detailed feasibility studies are required.

This opportunity appears to offer some scope for industrial development in the Valley area and, therefore, is worthy of further detailed study to determine its feasibility.

Parts Warehousing

Replacement parts warehousing represents an opportunity of both moderate complexity and medium probability. The key factor associated with this prospective venture is the size of the parts market which is not being efficiently served by local suppliers. This market will consist of replacement parts for equipment which do not have local OEM dealer outlets, and parts which are not carried in quantity by current suppliers.

A number of variables are associated with the development of a parts warehousing operation and a detailed feasibility study is required to assess the project. The opportunity is one which should be taken advantage of in the near future. It may be feasible on its own or it might be more appropriately developed in conjunction with another industrial venture.

Work Clothing

The work clothing laundry opportunity is moderate in complexity and low in probability. This project does not represent an obvious opportunity for industrial development in the Valley. However, it is characterized by a low requirement for co-ordination and a short time frame for implementation. In addition, the laundry, once established, has the possibility of expanding into work clothing manufacturing.

The feasibility of the project will depend on the volume of clothing that can be expected from Valley mines and the location of the plant relative to the volume flows. The government co-ordination required

for the plant is low and there are successful examples of similar operations in other B.C. resource centres. A detailed feasibility study could determine the probable demand for the service, the break-even load for the plant and the possibilities open to work clothing manufacturing.

Based on successful operations elsewhere, the development of a work clothing laundry operation in the Elk Valley is considered to warrant a detailed study to determine its feasibility.

Concrete Plant

The concrete plant opportunity is rated as being moderate in complexity and medium in probability. As was the case with the coal dust spray project, the key determinant of success for this venture will be the level of demand for concrete and concrete products in the Valley. In the case of concrete, the prospective plant will probably replace the supply from several smaller readi-mix plants already operating in the Valley. Therefore, some economic dislocation can be expected to occur in the short term.

The concrete plant project is characterized by a short time frame and low levels of government co-ordination and assistance. This project does not appear to warrant a detailed feasibility analysis at the present time. The key factor in determining the success of such an operation in the future, will be the level of concrete demand which triggers an existing or outside producer, to replace readi-mix capacity with more permanent capacity. When this demand level is reached and sustained, the changeover will likely occur.

Tie Mill

The railway tie mill opportunity is low in complexity and also low in probability. The key factor associated with the demand for the mill is the timing of rail revitalization, especially as it applies to the Valley coal hauling lines. Manufacturing of railway ties is

characterized by a potentially long time frame for mill development due to the uncertain timing of rail projects.

This opportunity is also expected to require a moderate level of government co-ordination and relatively low levels of public sector assistance. However, until the timing of the rail projects are finalized, a detailed feasibility study is not considered to be warranted. This timing will depend, in part, on decisions regarding the Crow's Nest Pass freight rate. Once the rail projects are finalized, the opportunity to manufacture rail ties in the Elk Valley should be re-assessed to determine its requirements for detailed study.

PRIORITIES FOR FURTHER STUDY

In summary, application of the qualitative criteria to the identified opportunities indicate that some are worthy of more detailed project feasibility studies. Feasibility assessments of the following projects are considered to be warranted:

- a replacement parts warehousing operation;
- a work clothing laundry service; and
- a coal load-out equipment manufacturing plant.

Feasibility investigations, in all cases, should be oriented towards establishing these businesses within the Elk Valley itself.

APPENDIX A

REFERENCES

REFERENCES

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APPENDIX B

LIST OF CONTACTS

LIST OF CONTACTS

British Columbia Government

Graham Kedgley	Co-ordinator, Office of the British Columbia Coal Co-ordinator
Erwin Henderson	Ministry of Energy, Mines and Petroleum Resources
Edward Dew-Jones	Ministry of Environment
Ian Back	Economist, Ministry of Industry and Small Business Development
Tom V. Santosham	Manager, Office of Procurement and Industrial Benefits

Government of Canada

Tony Reynolds	Director General, Industry, Trade and Commerce
Gordon Steinson	Industry, Trade and Commerce
Ross Brearley	Regional Economic Expansion

Municipal Government

Mayor A.J. Boersma	Fernie
Major H. Volkmann	Sparwood
Major R. Pinotti	Elkford
Loretta Montemurro	Administrator, Sparwood
R.A. Miles	Clerk-Administrator, Elkford

Associations

Jack Patterson	Manager, B.C. and Yukon Chamber of Mines
John Stashuk	Vice-President, B.C. Region, Machinery and Equipment Manufacturers' Association of Canada
R.P. Scherk	Chairman, Western Mining Purchasing Managers Group

Companies

Kenneth L. Berg	Director Corporate Purchasing, B.C. Coal
Alex P. Zaitsoff	Manager Materials Control, B.C. Coal
Donald McFarlane	Systems Engineering, B.C. Hydro and Power Authority
Joseph Aiello	General Manager, Byron Creek Collieries
Charles Kelly	The Canadian Public Affairs Consulting Group
Glenn P. Booth	Economist, Crows Nest Resources
T.S. Gerelus	Materials and Systems Co-ordinator Line Creek, Crows Nest Resources
Terence M. Gibson	Manager-Housing Development, Crows Nest Resources
R. Studney	Materials Management Supervisor Line Creek, Crows Nest Resources
Richard Wilson	Public Affairs, Crows Nest Resources
J.G. Gardiner	General Manager, Fording Coal
J. Morrish	President, Fording Coal
Peter Clarke	Canadian Industrial Benefits Advisor, Imperial Oil
Robert Hackett	Reliable Industrial Fasteners
Herb Pakrul	President, Sage Creek Coal
David Pipe	President, Westone Enterprises
Keith V. Remfert	Process and Mining Coal Preparation, Wright Engineers
Frank A.R. Willis	Vice-President Projects-Industrial, Wright Engineers

APPENDIX C

B.C. PROCUREMENT POLICY FOR MAJOR PROJECT DEVELOPMENTS SUMMARY

A PROCUREMENT POLICY STATEMENT FOR MAJOR PROJECT DEVELOPMENTS BY THE GOVERNMENT OF BRITISH COLUMBIA

POLICY:

The Government of British Columbia is committed to the growth and diversification of the province's industrial and service sector supply base and to the enhancement of the free flow of goods and services in the Canadian market. In order to achieve the competitive productive potential of the province's resource processing industries, its suppliers, and engineering and other service sectors, the Government of British Columbia intends to seek the active support of the private and public sector in encouraging competitive sourcing from British Columbian and other Canadian suppliers in all major projects undertaken in the province.

The province will be reviewing, through the Ministry of Industry and Small Business Development, all projects subject to the various project guidelines procedures with a view to supporting and developing British Columbian and Canadian expertise. The province also intends to cooperate with project developers in identifying key opportunities for continuing domestic production arising out of major project developments, including, where feasible, opportunities for the design of new products or the transfer or development of new technology.

OBJECTIVES:

The Government of British Columbia intends to cooperate with the developers in all major projects in identifying opportunities to utilize competitive domestic products and services in all project phases. While procurement of domestic products and services by developers is intended to be on a voluntary, competitive basis, attainment of the goal of developing an efficient supply base to major projects will reap income, employment, and long-term industrial benefits for all British Columbians and Canadians.

GUIDELINES:

The Government of British Columbia, in order to provide the maximum exposure and opportunities for developers to assist in the development of project supply sectors, will be encouraging the earliest notification of development intentions. The government will also be anticipating that developers will provide as detailed a listing as possible of intended purchasing schedules. The government will be encouraging developers to set their own goals for domestic content, and will be actively involved in assisting companies in meeting these goals. A review of the procurement plans and goals will be undertaken and will form one element of the project evaluation on which cabinet will base its decisions. Procurement monitoring will continue throughout the construction phase.

It is expected that the early notification of procurement intentions will enable the Ministry of Industry and Small Business Development to assist developers in gaining the maximum possible exposure to local supply capabilities and potential, as well as provide local suppliers with appropriate lead time to gear up production facilities. To assist in the process, it will be expected that, in certain instances, developers will establish local procurement or engineering offices.

Information obtained by the province from this process will be made available to other provinces upon request, with the concurrence of the developers.

A review of the effectiveness of the procurement guidelines in meeting the policy objectives will occur during an initial three year implementation period. If it is found that the policy is imposing unnecessary burdens on project developers and not providing the anticipated benefits, adjustments to the policy will be made.

BENEFITS:

The Government of British Columbia anticipates that, with the cooperation of project developers, a strengthened and diversified manufacturing and service sector can be developed that will be competitive in world markets. Benefits to developers will include the establishment of a more convenient, cost-competitive, innovative core of product suppliers and services. Additional benefits will include the potential for identifying new market opportunities for British Columbia firms.

APPENDIX D

WESTERN MINING PURCHASING
MANAGERS GROUP
B.C./CANADIAN CONTENT COMMITMENT

WESTERN MINING PURCHASING MANAGERS GROUP

B.C./Canadian Content Commitment

The members of W.M.P.M.G. which represent most mining companies in Western Canada have always been committed to increasing B.C./Canadian content. The following are positive steps and actions taken by this group to encourage increased B.C./Canadian content:

-"Opportunities in Mining" brought together the W.M.P.M.G. and the "Machinery and Equipment Manufacturers Association of Canada" (M.E.M.A.C.) which opened the door for an on-going dialogue; and over the past year, a number of meetings have been held in Calgary and Vancouver exploring ways to open communication lines to help encourage further Canadian content and solve mutual problems.

- W.M.P.M.G. members have been over the years working with many other manufacturing companies; to encourage expansion in B.C. or Canada; and to encourage foreign companies to relocate or sublet some of their manufacturing to Canadian companies.

- W.M.P.M.G. has developed a policy statement (attached) which reinforces our commitment to B.C./Canadian content.

  J. Romanow, President of M.E.M.A.C., stated on October 20, 1981, that he wished to go on record that he was in complete agreement with the W.M.P.M.G. Policy (Canadian Content).

- Canadian content is encouraged as evidenced in the attached copy of a page taken from a member company's bid document.

- B.C. and Canadian based mining companies who have off-shore projects promote the use of Canadian Technology equipment.

- W.M.P.M.G. is willing to provide information on areas that require further investigation to encourage more involvement by B.C./Canadian industry.

B.C. PROCUREMENT POLICY/W.M.P.M.G. POLICY STATEMENT

"1. The W.M.P.M.G. support a program of Canadian Economic Development to serve two prime goals:

   i) Through increasing Canadian content in W.M.P.M.G. companies purchases it ensures maximum impact of spin-off benefits from Resource Development to the people of Canada.

   ii) Such development provides a local ready source of materials and services to member companies within the Group.

2. Canadian Economic Development be pursued by W.M.P.M.G. through ongoing formal and informal associations with MEMAC and others.

3. The W.M.P.M.G. absolutely censure preferential treatment of any supply support base which could balkanize Canada and erect artificial barriers to interprovincial trade while continuing to purchase Canadian goods and services which are competitive on the basis of time, cost, quantity and quality.

4. The individual member companies of W.M.P.M.G. reserve the right to support infant industries, which are critical to their operations, in any manner which they deem necessary."

CANADIAN CONTENT (CANADIAN VALUE ADDED)

"All bidders are encouraged to promote the developement of Canadian skills and sources of supply. Supportive development of appropriate regional supply sources will recognize and stimulate endeavours to advance levels of Canadian Value Added."

Purchases of materials and services, however, will be considered on total best value determined through appropriately weighing all relevant factors such as technical capability, quality, assurance of supply, delivery, service, and price, etc.

For bid purposes and to establish the level of Canadian Content, the bidders shall include with his proposal a statement of the total Canadian Content in the goods on which his proposal is based, as percent or as dollars.

For goods imported into Canada, the Canadian Content may be based on the following:

1) Any material or labor supplied or performed on the goods in Canada.

2) Duties or taxes paid to the Canadian Government.

3) Overhead, profit, advertising, sales and administrative expenses; corporate income taxes on a pro-rated basis; and incoming and outgoing inland freight in Canada.

For goods manufactured in Canada, components purchased from sources outside of Canada shall be subtracted from the total content.

The total of Canadian Content plus Non-Canadian Content must equal the quoted price.

Proof of Canadian Content need not be included with the proposal, however, the successful bidder may be required to submit proof of Canadian Content prior to the issuance of a purchase commitment.